

Current Korean Slender System for optimimizing Daily TRA and TRI

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Contents: Slender TRI & TRA

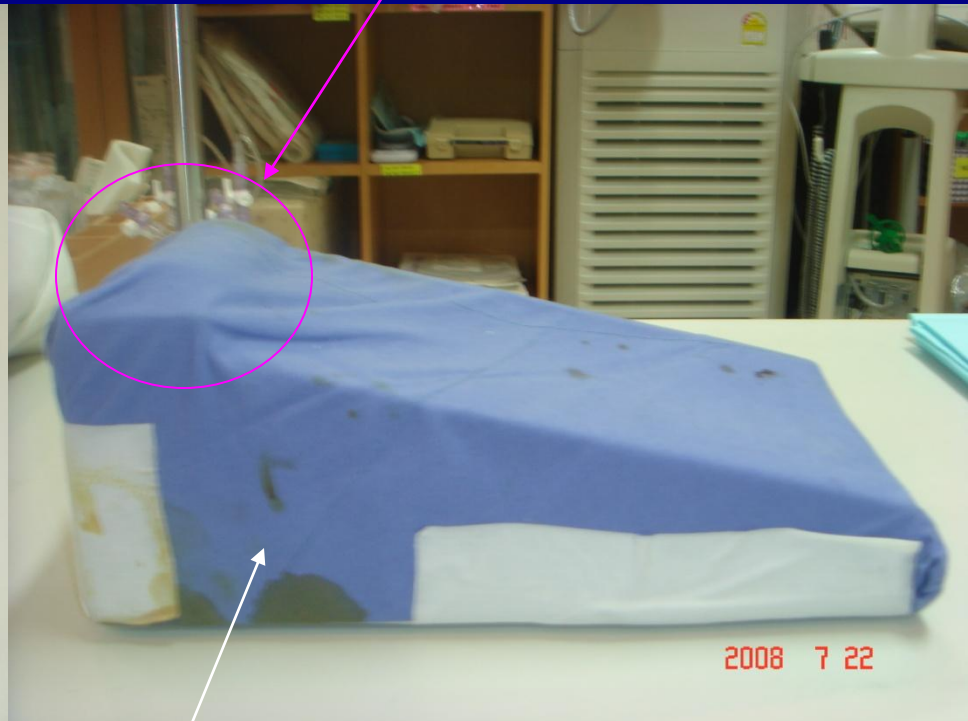
1. Preparation of the procedure
2. Vascular Access
3. Device Selection
4. Sheath Removal and Arterial Compression

Preparation of Procedure

-KUMC Guro Hospital Style-

Hand-made Arm Board

Soft Ridge for Wrist Extension



Wood Body

Vascular Access for Diagnosis

1. Enough Anesthetics-Lidocain infiltration
2. Incision; No!!
3. Attack ant wall of radial artery at 'one puncture' to reduce radial artery spasm or side wall attack in case of mobile radial artery
4. Short needle vs. Long needle (good for proximal attack)
5. Straight tip soft wire
6. Short sheath (4F Terumo)
7. Routine Heparin; 3,000 unit
8. Vasodilator; Nitroglycerin 200 microgram (except Acetylcholine Provocation Test)

Positioning of Target Arm



Antiseptics; Semi-soaking Way

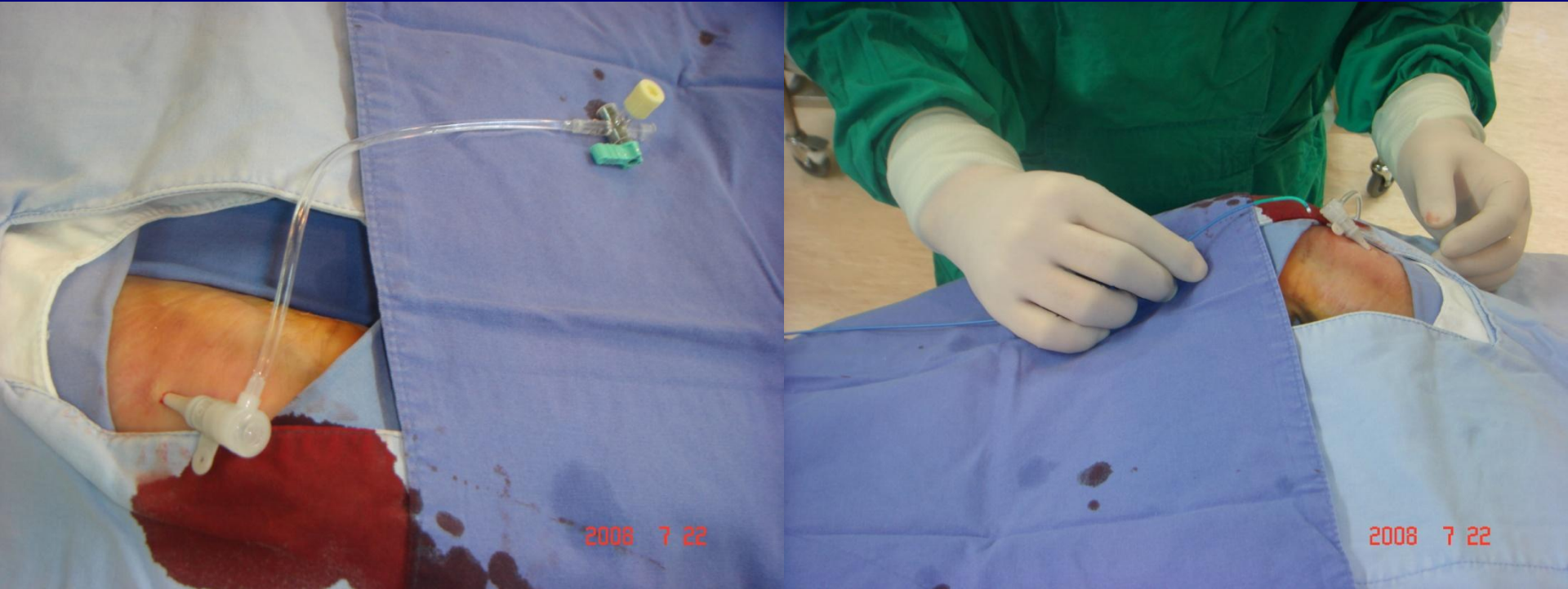


Betadine (Potadine) & Alcohol only

Radial Artery Access



Final Preparation

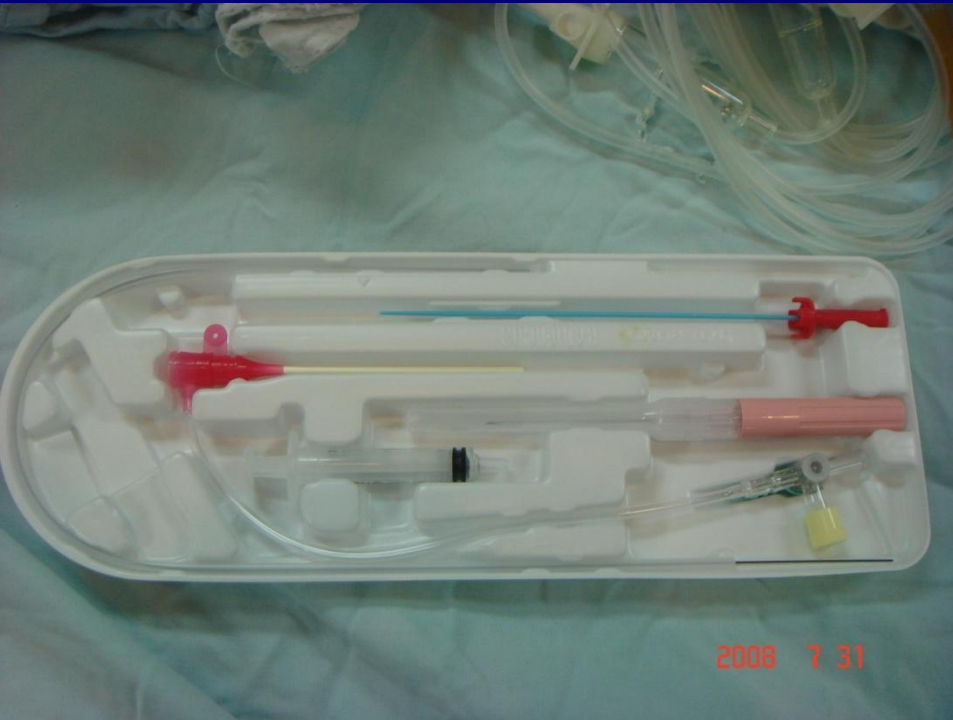


4F Terumo Sheath

Device Selection

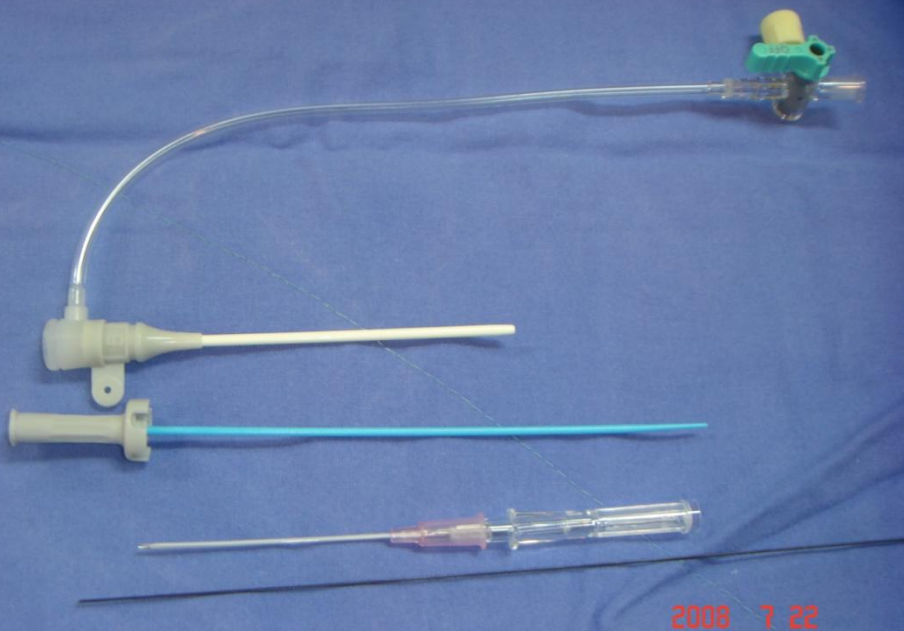
-KUMC Guro Hospital Style-

Terumo Sheath Set (4F)

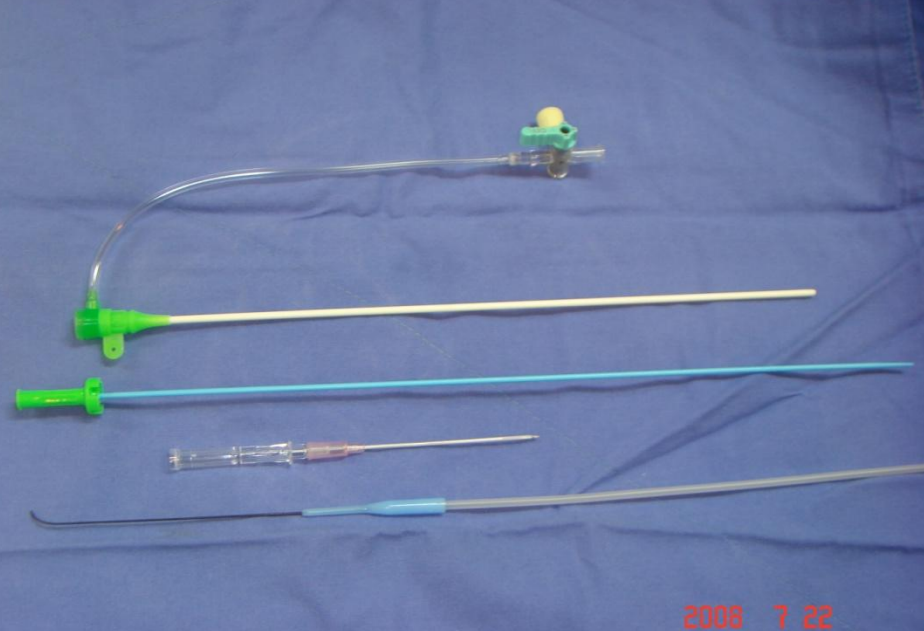


Routine 4F Diagnostic Angiography
5F Transradial Intervention

Terumo Sheath Set (5F, 6F)



5F; Simple Transradial Intervention



6F; For More Complex TRI with IVUS

** Purpose of Wire Selection

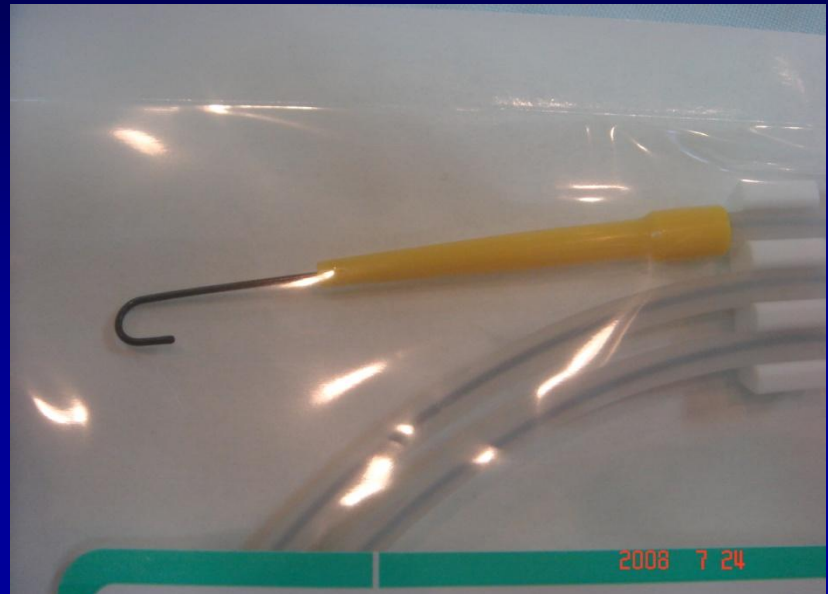
1. Wiring without routine fluoroscopic guide
; to reduce the procedure time and radiation exposure.
2. Minimize of the radial artery injury
; prevent wire-induced perforation (esp side branches), spasm and rupture...

** Personal Preference

; short, narrow, completely curved soft tip-wire

(035 Soft Terumo 1.5J curve)

Complete J Curve 035 Wire



For Selective Wiring

RADIFOCUS® GUIDE WIRE M

REF: **RF*GA35153M**

0.035"
(0.89mm)

ANGLED

FLEX L: 3cm

150cm

L:

LOT: 080422

EXP: 2010-03

TERUMO CORPORATION
TOKYO 151-0072, JAPAN MADE IN JAPAN

EC REP **TERUMO EUROPE N.V.**
3001 LEUVEN, BELGIUM

CE 019



In different radial artery or anatomy...

Catheter Selection for Diagnosis

1. Routine use for both LCA & RCA (4F)
; Terumo TR catheter (Radial TIG II)
→ Switched to RM catheter or CR Catheter (JSM)
2. Selective use (4F)
 - 1) Judkins Left, Right (4F)
 - 2) Jung Sung Medical (JSM)-KUMC Guro Style
'RM Catheter' (Rha SW/Moon Sang Ki)
'CR Catheter' (Cheon BW/Rha SW)
3. For Selective Peripheral Angiography
; SM 1 (Simmons 1 Curve, 4F), 4F Headhunter,
4F Long MP-1 (150cm)-for BTK angiography

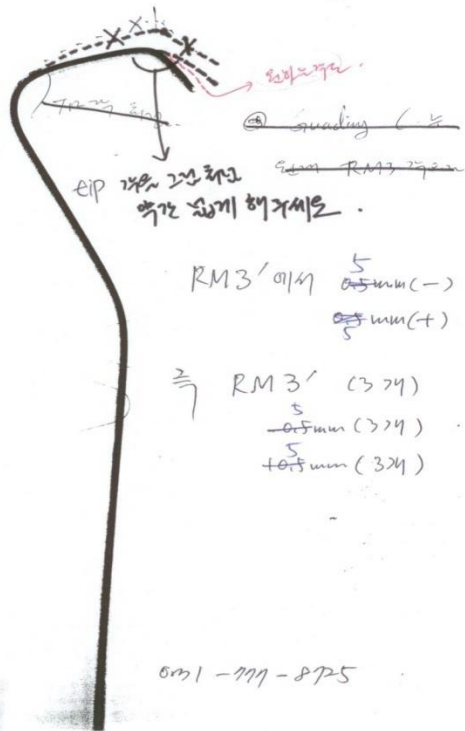
4F TR Catheter



More than 95% of Success Rate in both LCA & RCA in KUMC Guro

New Catheter Design (KUMC)

IR →
RM3'



RM3' 이하 5mm (-) 3γ
5mm (+) 3γ

RM3' (3γ)
5mm (3γ)
+5mm (3γ)

0m1-111-875

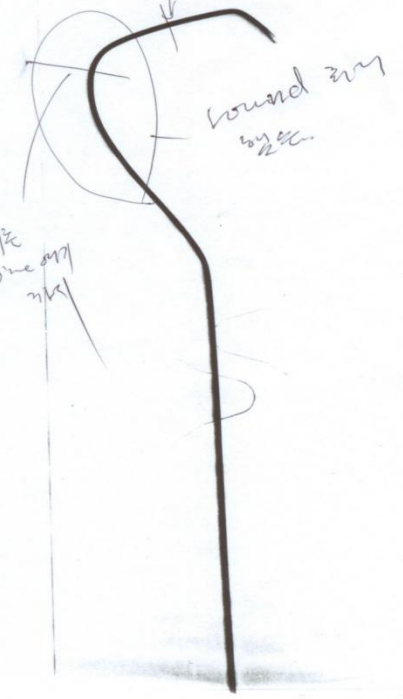
RM 1

* RM 1 → 기존
RM 1' → 변경 (메쉬 짧게)



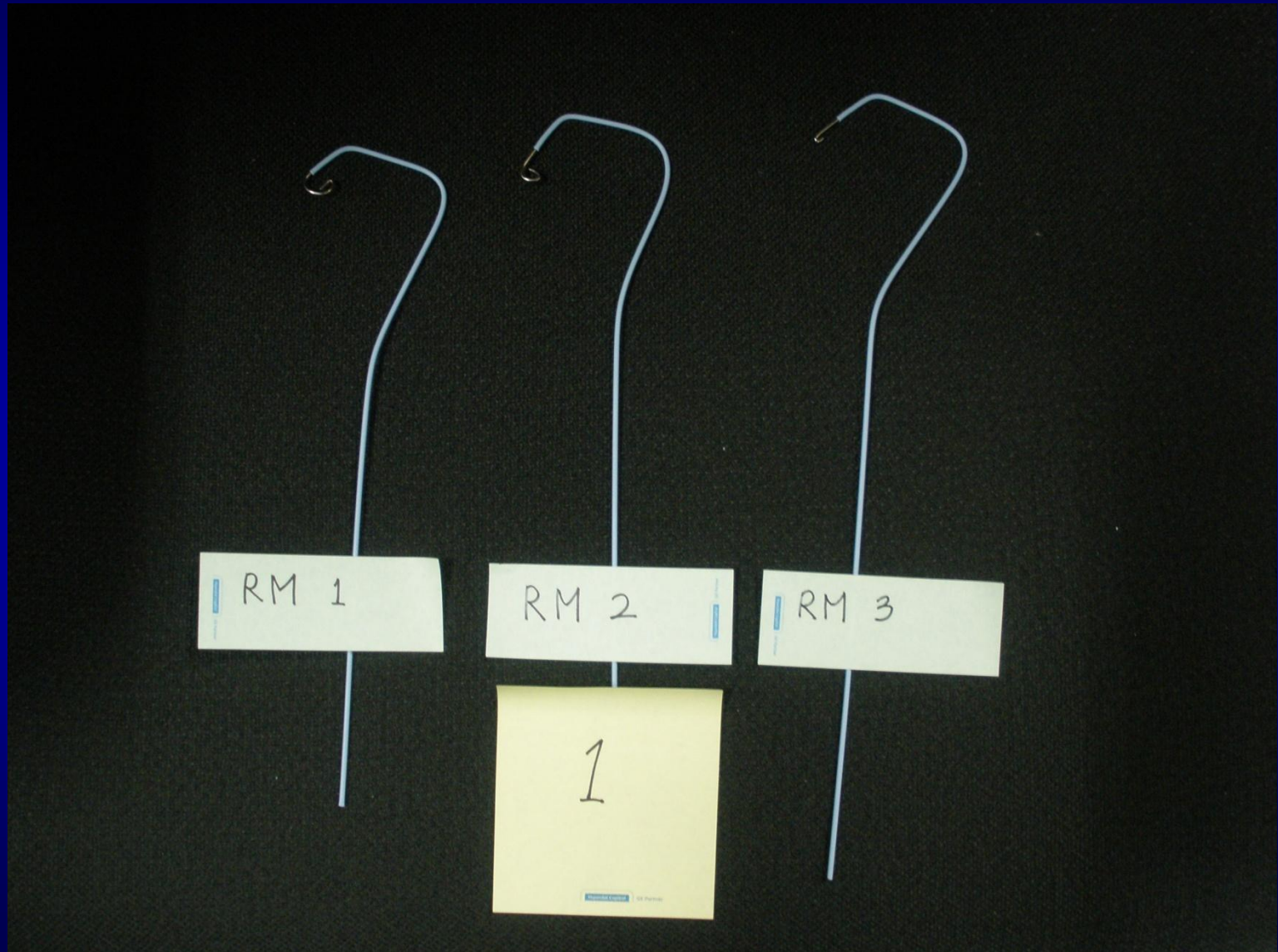
RM 3'

* RM 3 → 기존 (dmsc 변형 타입 wire 2개)
RM 3' → 변경 (메쉬 짧게)

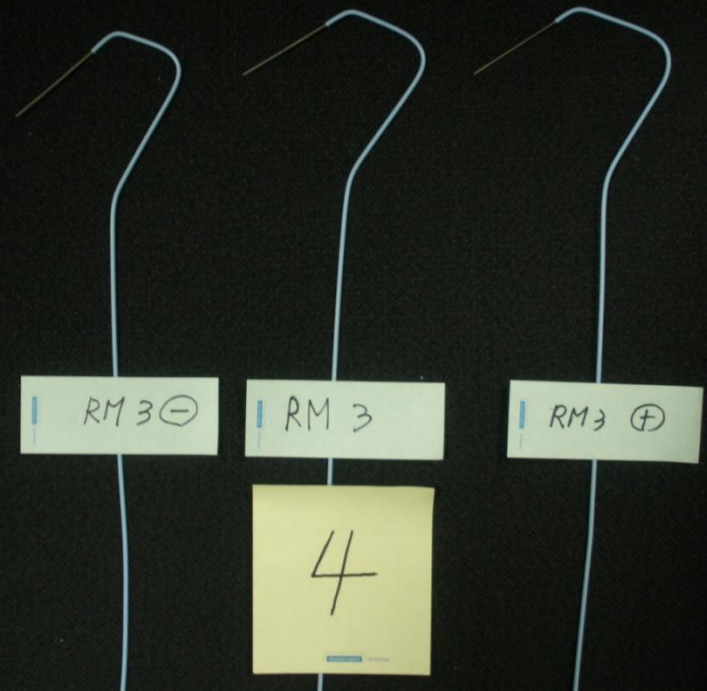
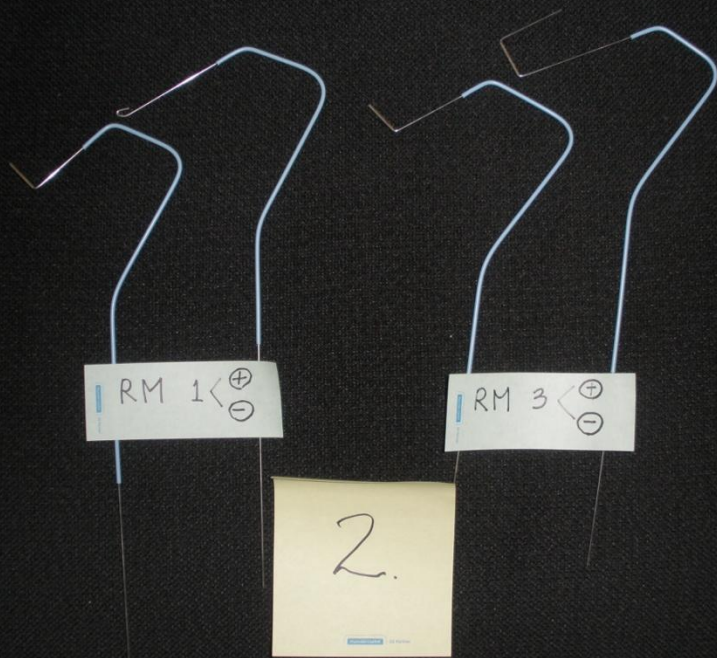


기존 wire 2개

Product Manufacture Processing



Product Manufacture Processing



JSM RM Catheter (4F)



RM 3.5, 4, 4.5

JSM CR Catheter (4F)

JSM* Angio Catheter
4F CR 4.0

제품명 : 경피카테터
형 명 : E
굵기(FRENCH SIZE) : 4F
허용 G/WIRE : 0.038
길이(LENGTH) : 100CM
측면홀(SIDE HOLE) : NONE
제조년월일 : 2007.06.12
유효년월일 : 제조 후 3년
포장단위 : 1EA
제조번호 : JC070612
업허가번호 : 제 1983 호
품목허가번호 : 제 04-687 호

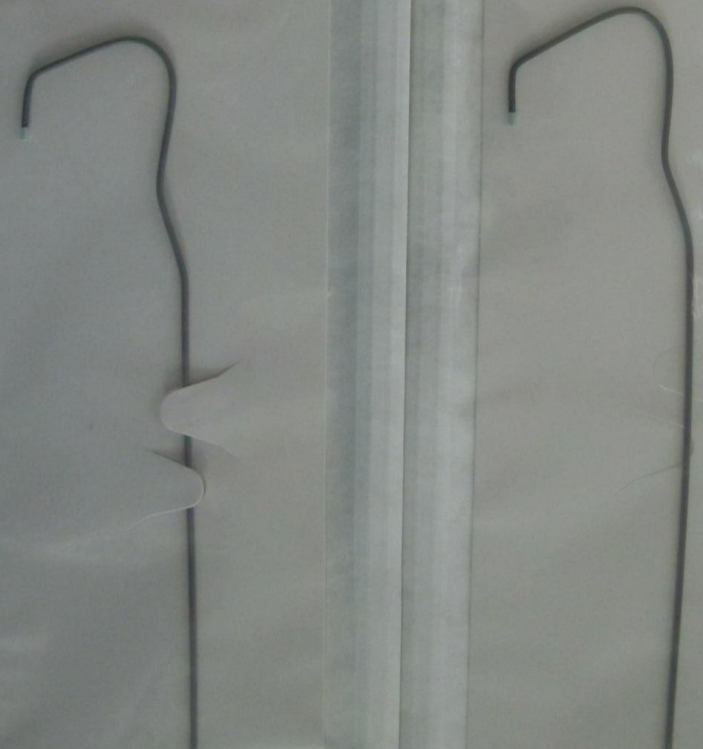
* 본 제품은 일회용 의료기기입니다.
멸균방법 : E.O GAS
* 본 제품은 일회용 의료기기입니다.

주의사항
(1) 본 제품은 멸균된 일회용 제품이므로 재사용하지 말고
(2) 골과, 비틀어짐, 상처 등이 있는 제품은 사용하지 말고
(3) 포장에 파손된 제품은 사용하지 말고
* 보관방법 : 직사광선을 피하여 보관할 것

제조업자 (주)정성메디칼
주소 : 경기도 양주시 풍암동 5442-1

2008 7 25

2013/04/17



Simmons 1 Catheter for Carotid

ANGIOGRAPHIC CATHETER

ANGIOGRAPHIEKATHETER / CATHÉTER D'ANGIOGRAPHIE
CATÉTER ANGIOGRÁFICO / CATETERE ANGIOGRAFICO
ANGIOGRAFIE CATHETER / ANGIOGRAFIKATETER
ANGIOGRAFIKATETRI / ΚΑΘΗΤΗΡΑΣ ΑΓΓΕΙΟΓΡΑΦΙΑΣ
血管造影用カテーテル

4 F SIM 1

SOFTOUCH®
SIMMONS 1 CURVE
NON-WIREBRAID

LENGTH

Longueur
Länge
Longitud
長さ

100 cm

SIDEHOLES

Ouvertures Latérales
Seitenlöcher
Orificios laterales
サイドホール

0

RECOM. GUIDE WIRE

Guide recommandé
Empf. Führungsdraht
Alambre guía recomendado
適合ガイドワイヤー

.035"

.889mm

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Manual Compression (1)



What's this?



Manual Compression (2)



Neptune PAD (TZ medical)

1. Composition

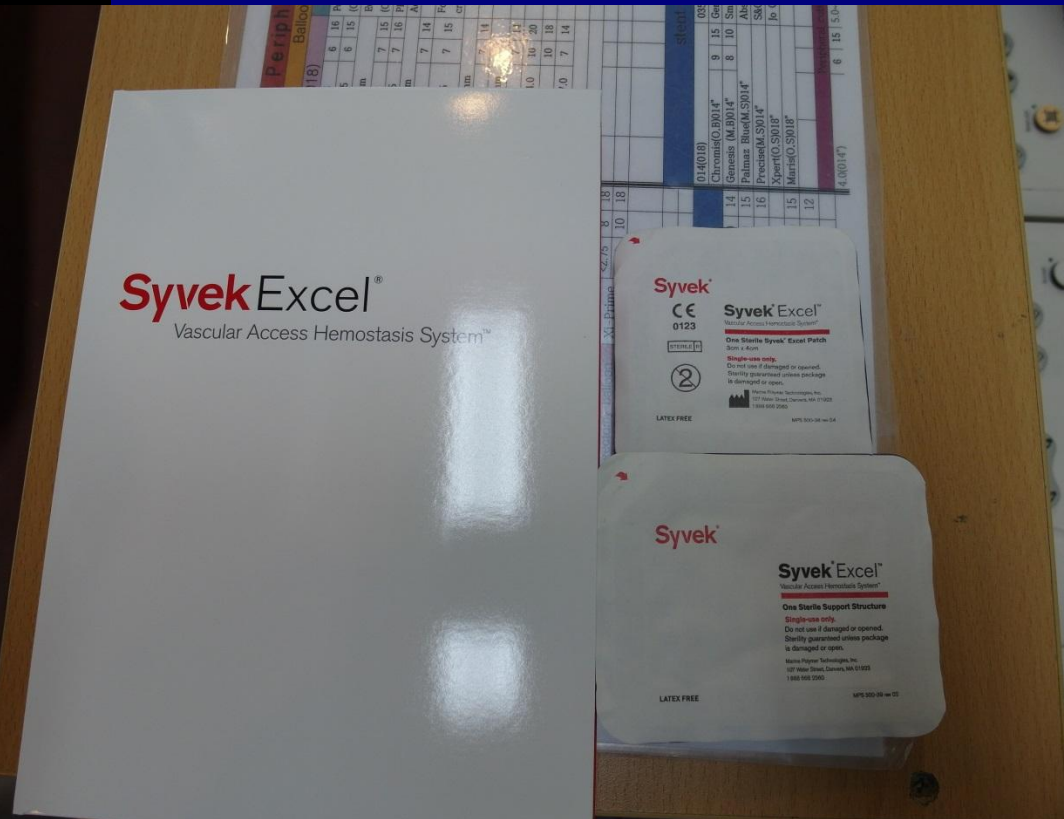
; Calcium alginate pad alone

2. Function

; rapid control of bleeding and provide hemostatis in vascular access site

3. Only use after the TRI, not for the diagnostic angiography...

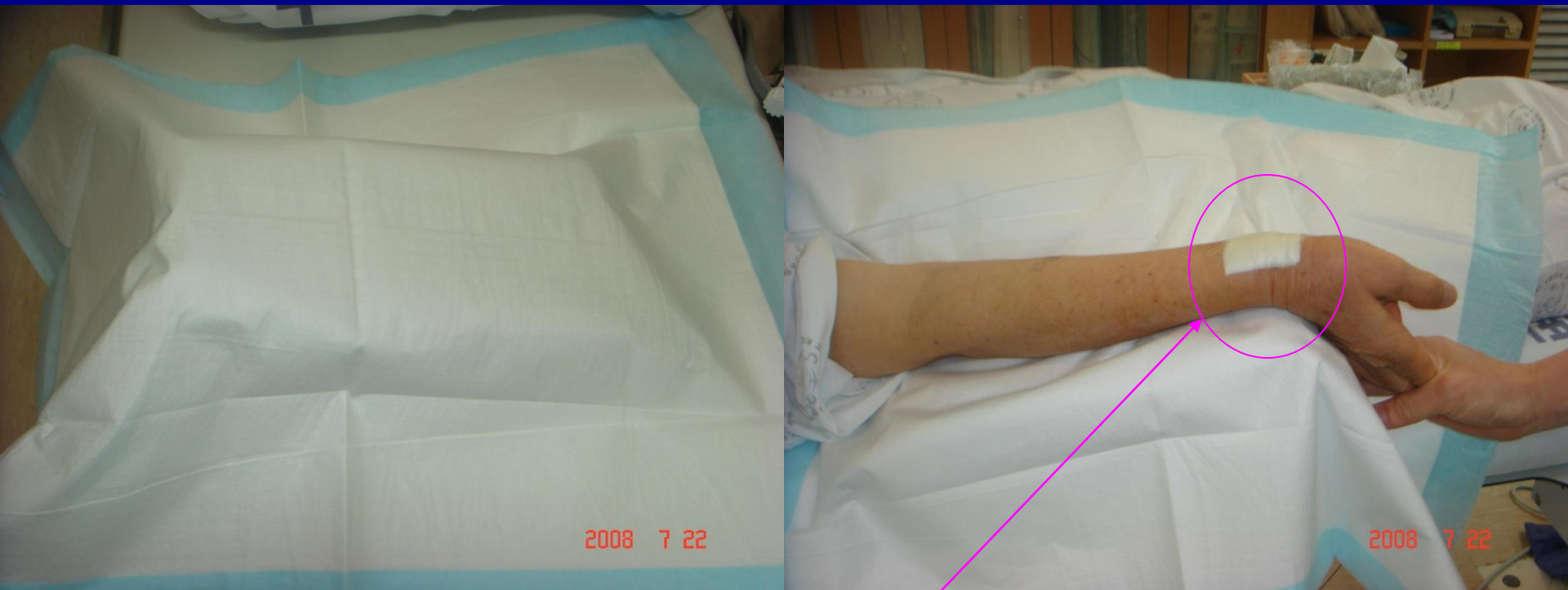
Other PADs



TRA Summary

1. Sheath; Terumo 4F
2. Medication; Heparin 3,000 U, No NTG
3. Wire; 035 Soft Terumo (1.5J)
4. Catheters; 4F RM, CR/ JL, JR
5. Routine Ach Provocation test
6. Manual compression
7. Stay for only 1 hour and discharge in case of no significant disease
(Procedure time < 30 min, Stay for 1 hour)

For TRI; Arm Board Preparation



What's this?

Answer is... Topical Anesthetics

For Reducing Patient's Discomfort



Lidocaine 25mg, Prilocaine 25mg/ 1g oint

1.5-2.0g / 10 cm², closed, thick apply, 1-3 hr ahead of procedure...

For Routine TRI (5F, Medtronic)

1. LCA

; Ikari Lt (IL 4), RM, CR, Judkins Lt,
Amplatz Lt, EBU...

2. RCA

; Ikari Rt (IR 1.5), RM, CR, Judkins Rt,
Amplatz Lt, Amplatz Rt...

Terumo Ikari 5F Guiding Catheter



Terumo Ikari 5F Guiding Catheter



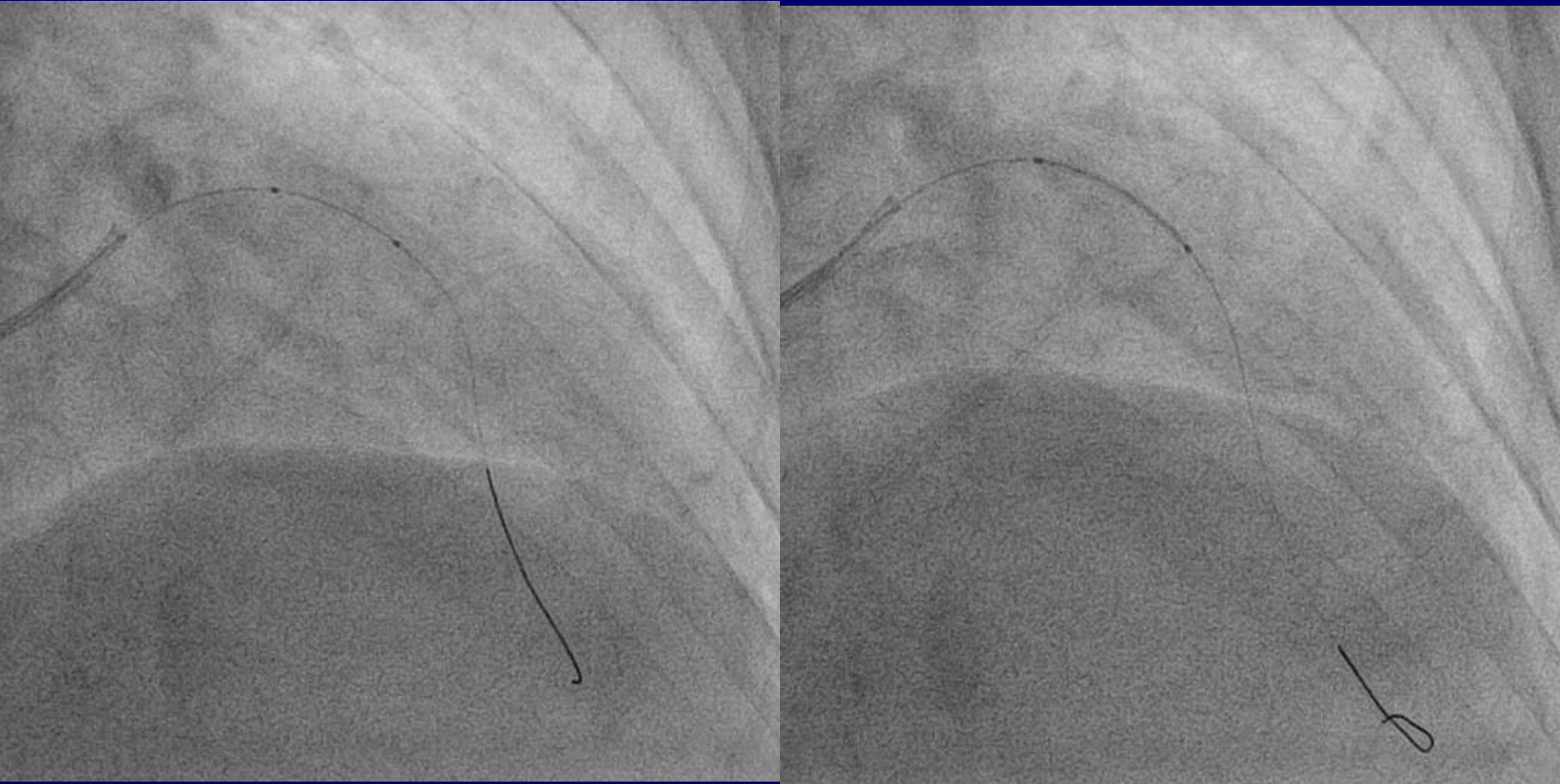
One guiding for Multivessel Disease by Transradial Route



5F Ikari Guiding Catheter; IL 4.0

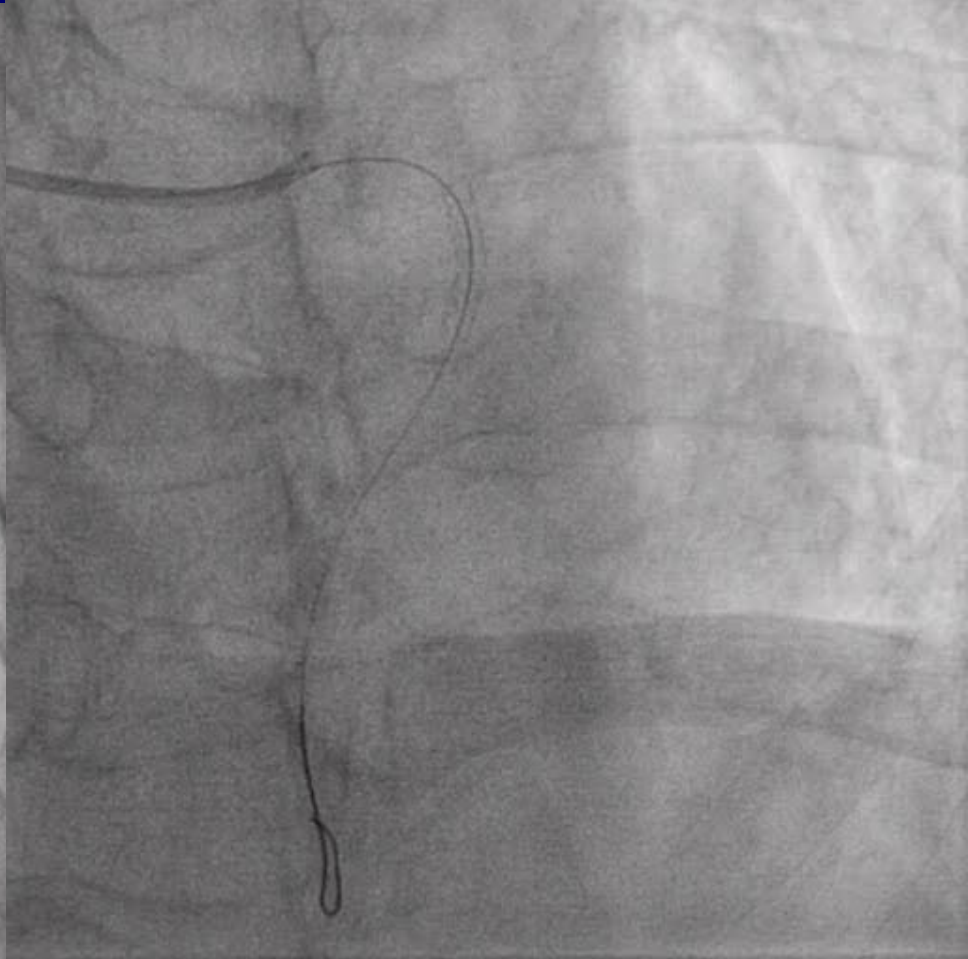
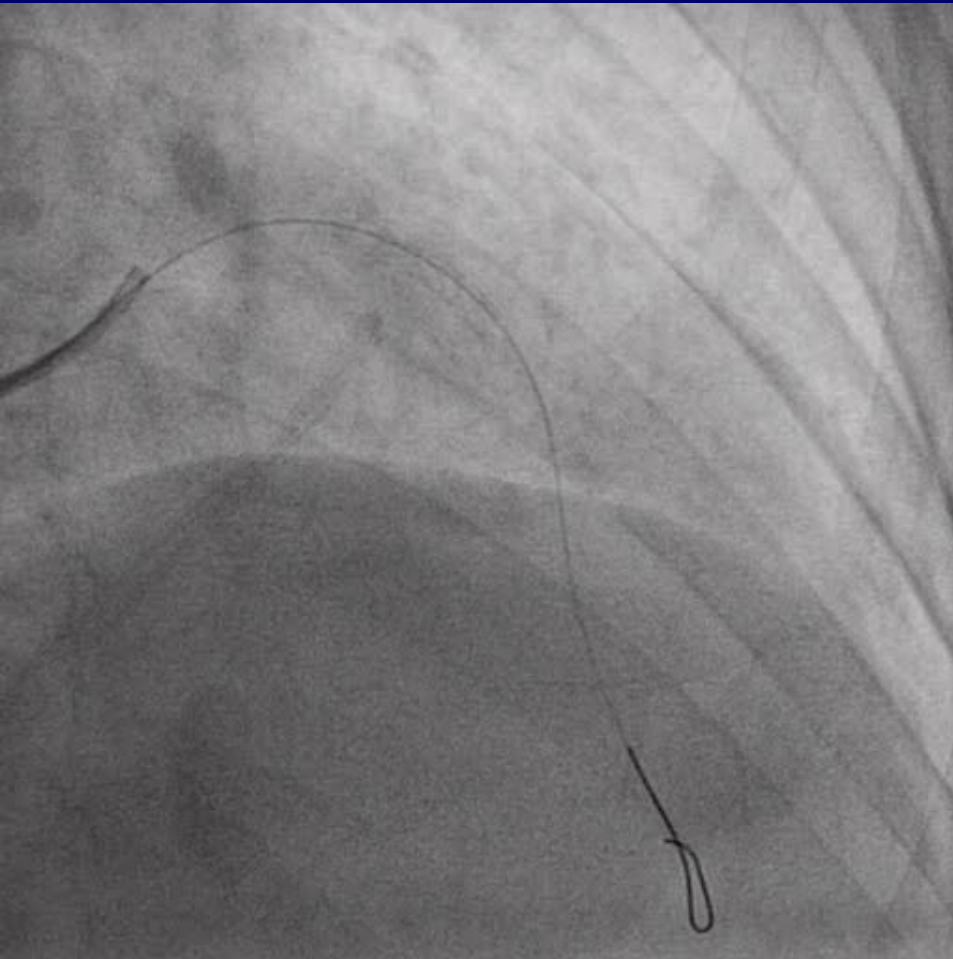
5F; Single stenting, No IVUS, Non-bifurcation
6F; True Bifurcation, IVUS or OCT

Predilation and Stenting

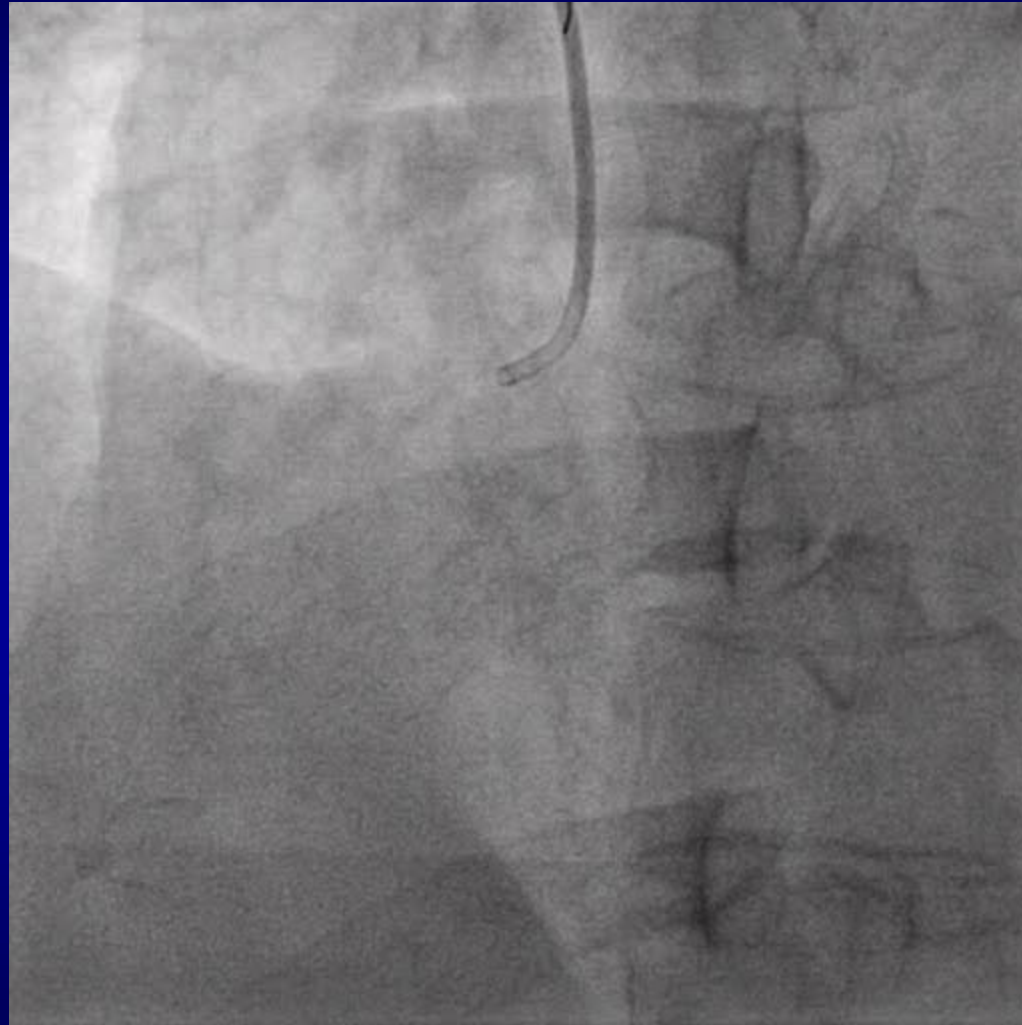


Fluoroscopic storage to reduce radiation

Post-Stenting

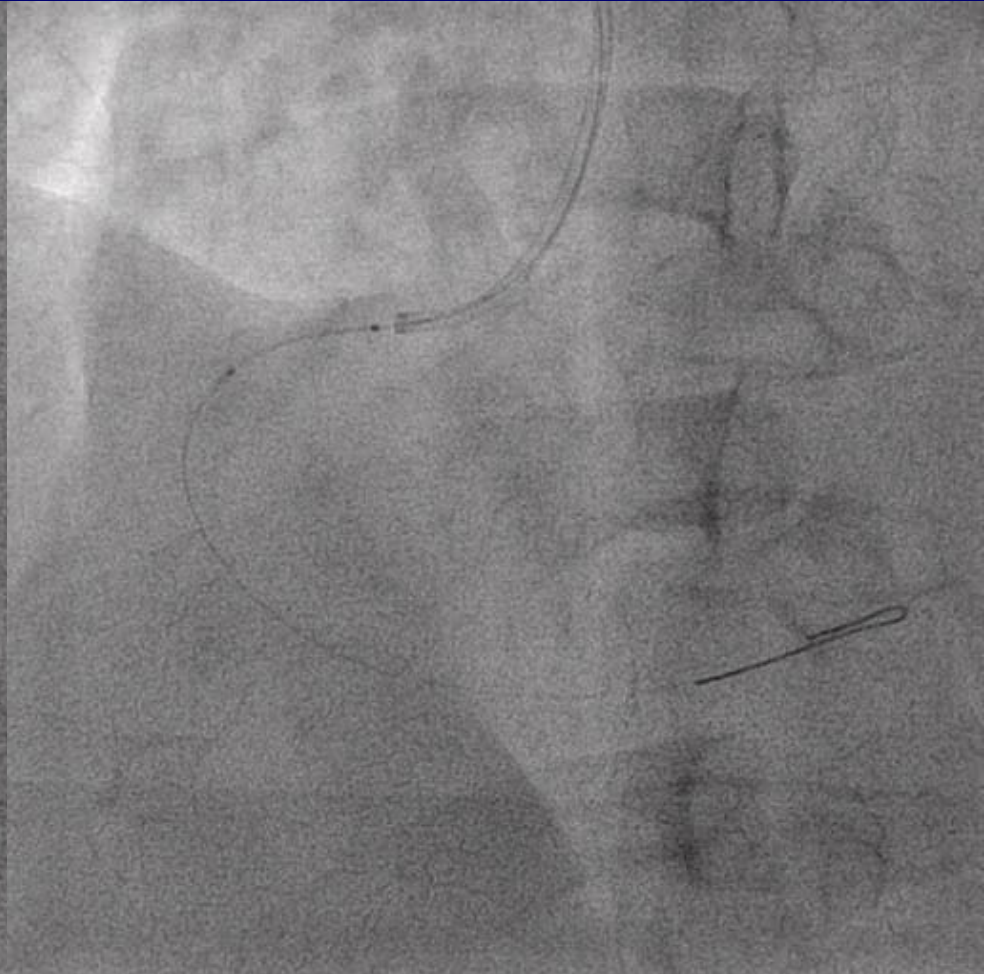


Direct Conversion for RCA Intervention

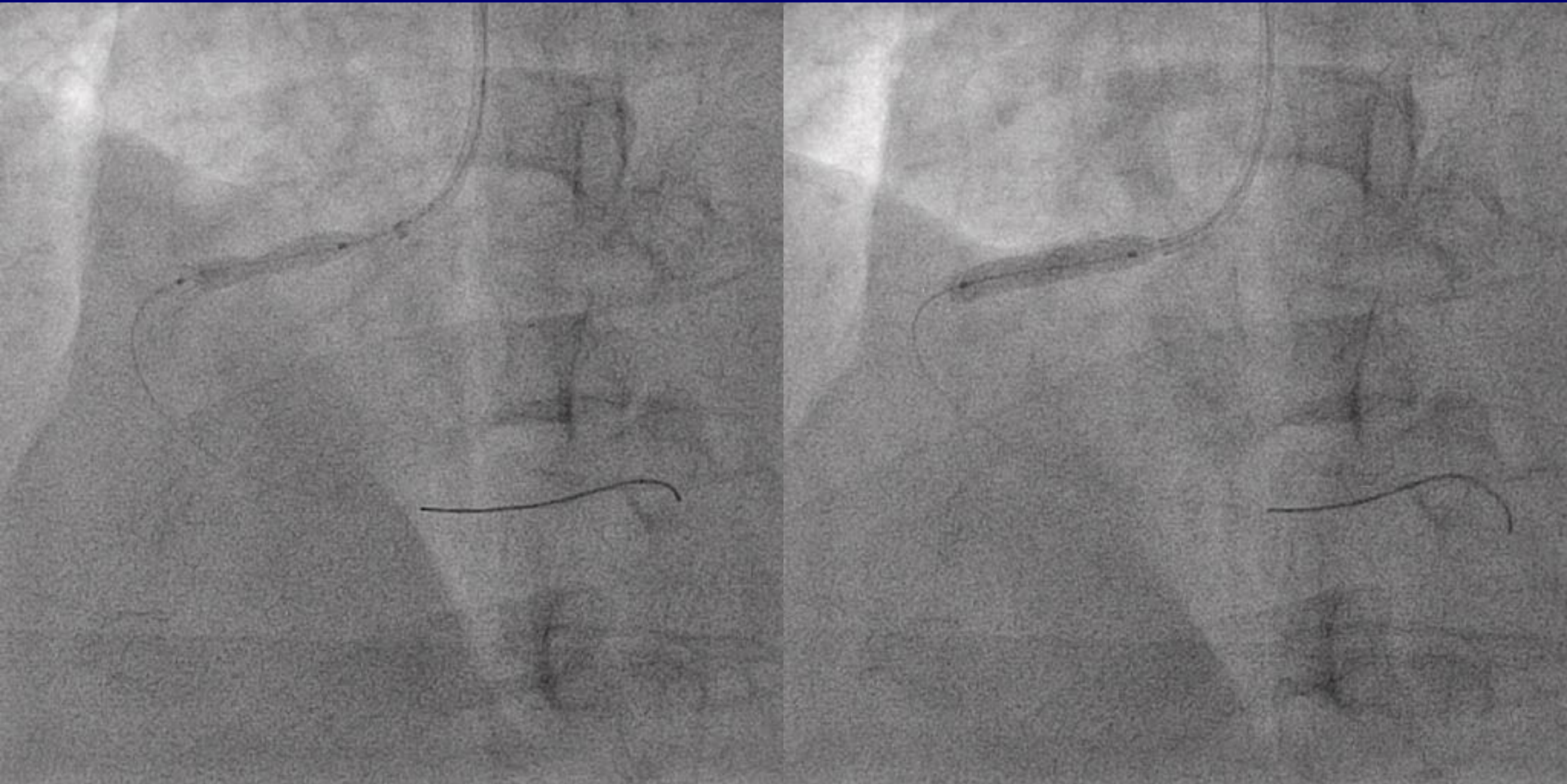


Same guiding catheter and same 014 Runthrough Wire

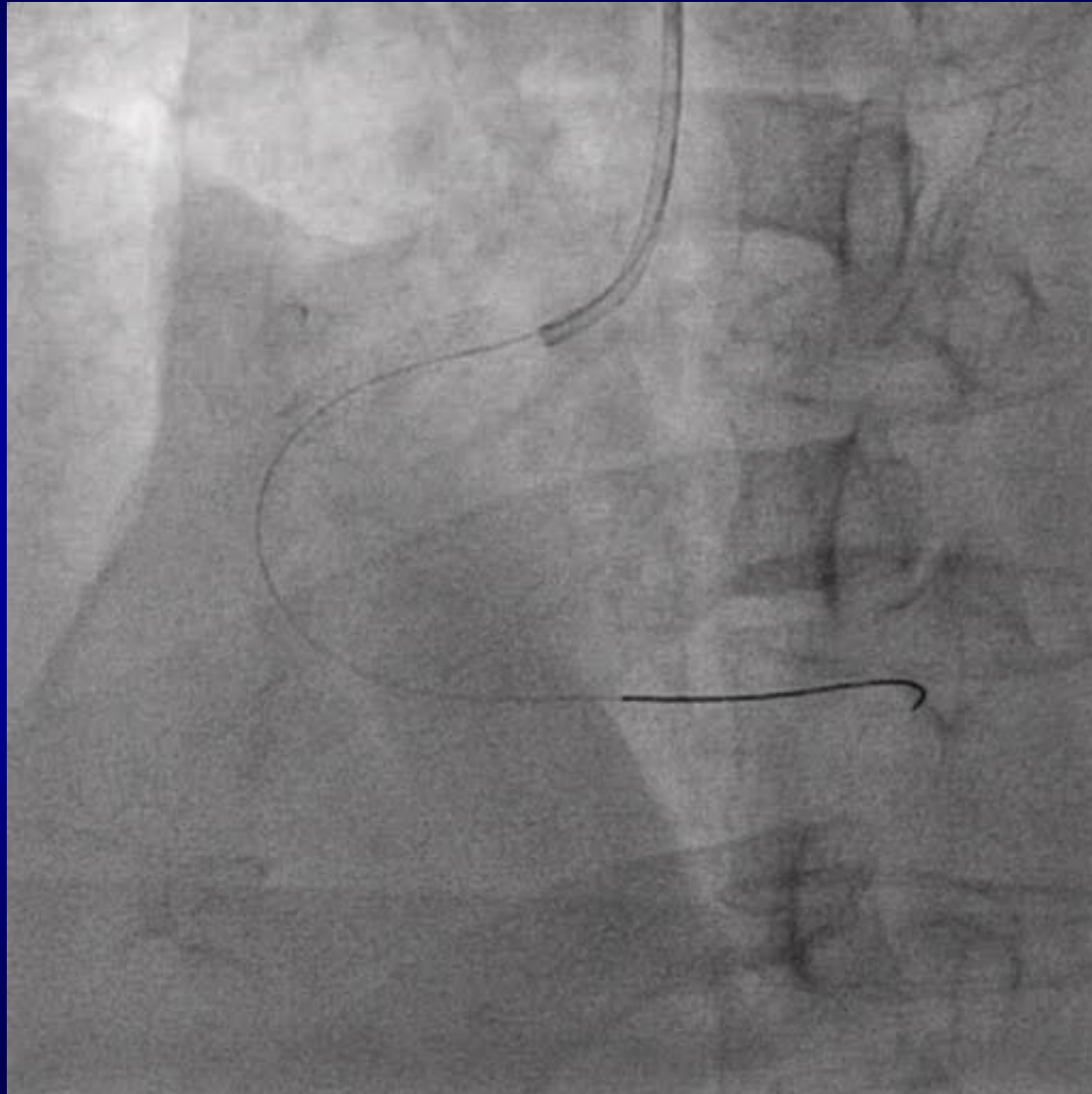
Predilation



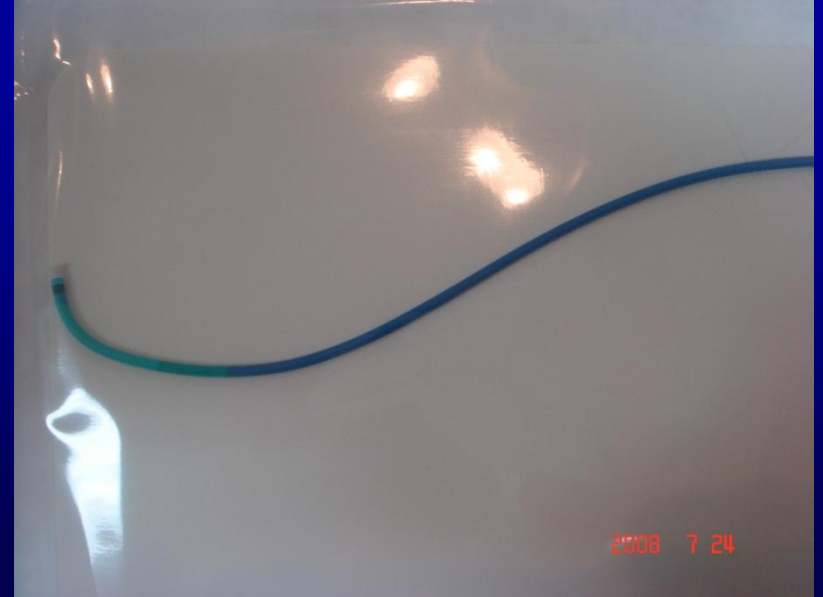
Stenting and Adjuvant Balloon



Final Angiography



Judkins 5 F Guiding Catheters



5F EBU Catheters

Launcher

GUIDING CATHETER

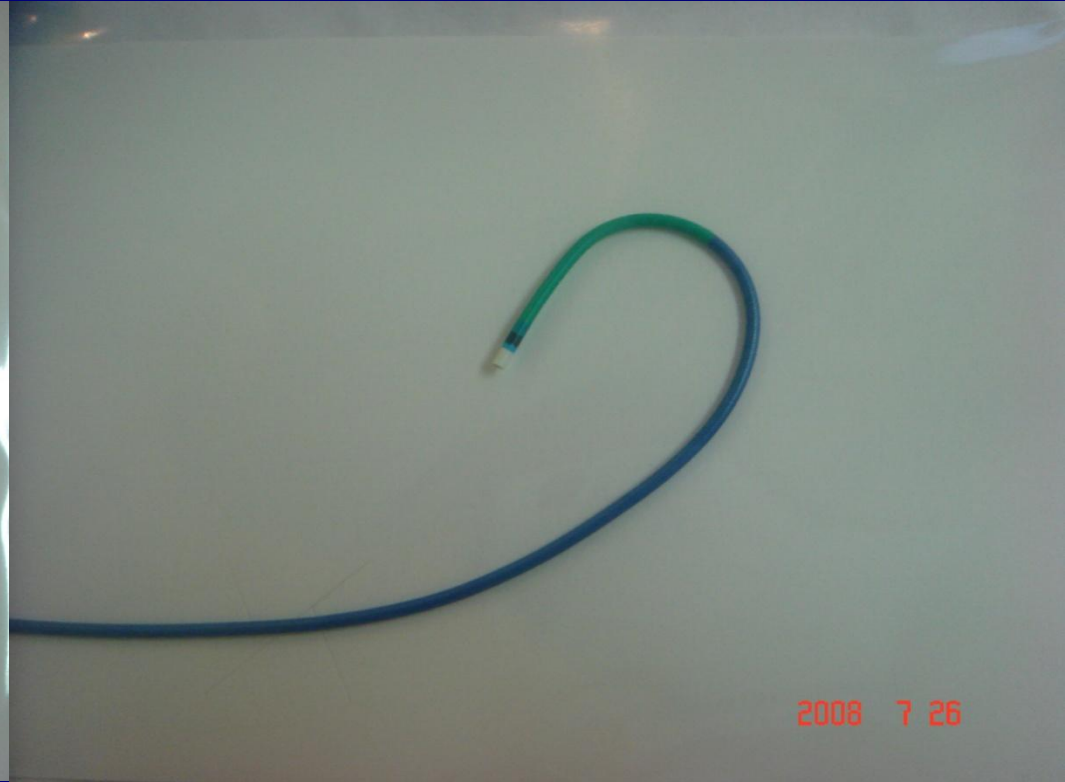
Zaváděcí katétr / Guidekateter / Geleidecatheter / Ohjainkatetri / Cathéter-guide /
Führungskatheter / Καθετήρας Οδηγός / Vezetőkatéter / Catetere Guida /
Ledekateter / Cewnik prowadzący / Cateter guia / Zavádzací katéter /
Catéter guia / Ledarkateter / Kılavuz Kateteri / ガイディングカテーテル

5F

.058"

EBU3.5

2008



2008 7 26

5F Amplatzer Catheter

Launcher

GUIDING CATHETER

Zaváděcí katétr / Guidekateter / Geleidecatheter / Ohjainkatetri / Cathéter-guide /
Führungskatheter / Καθητήρας Οδηγός / Vezetőkatéter / Catetere Guida /
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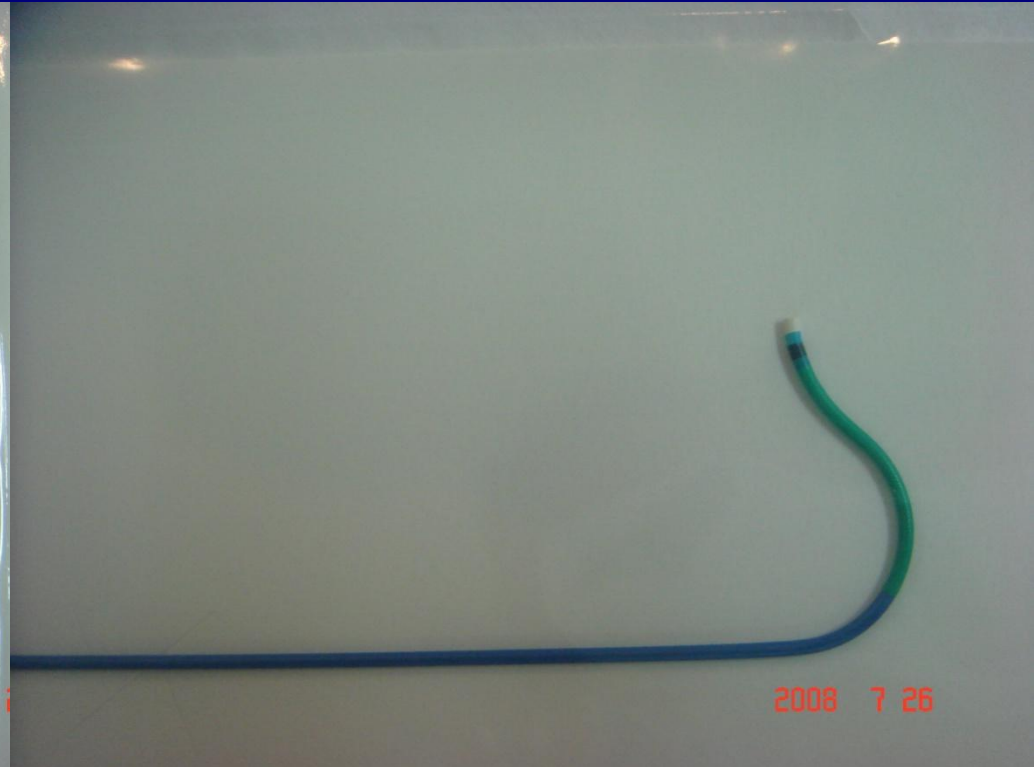
5F

.058"

AL1.0

2008 7 1

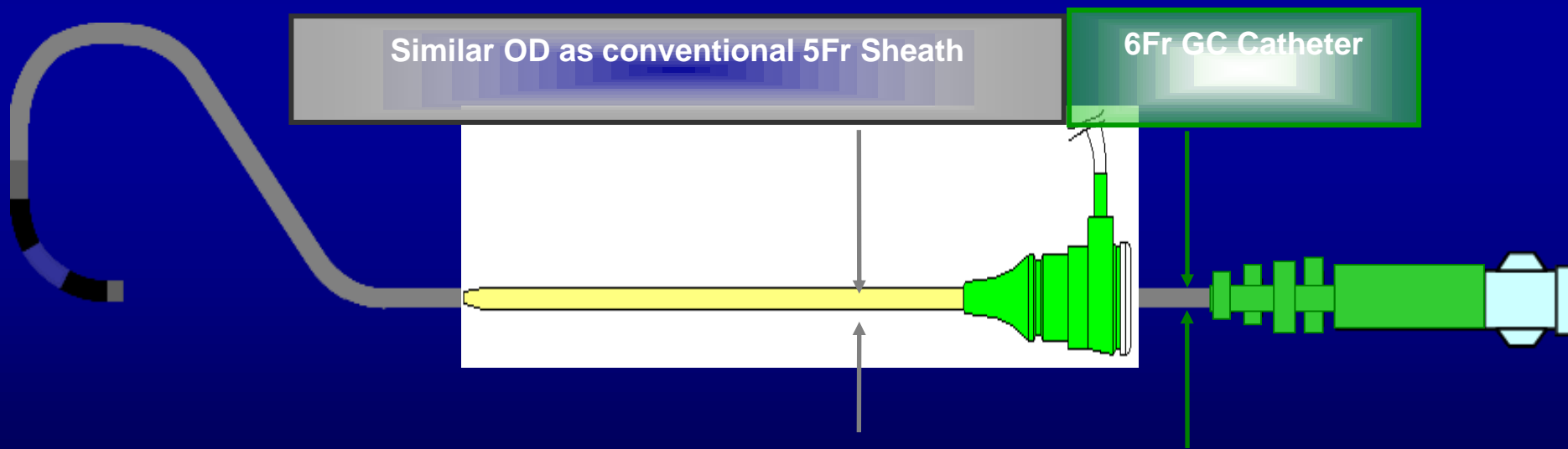
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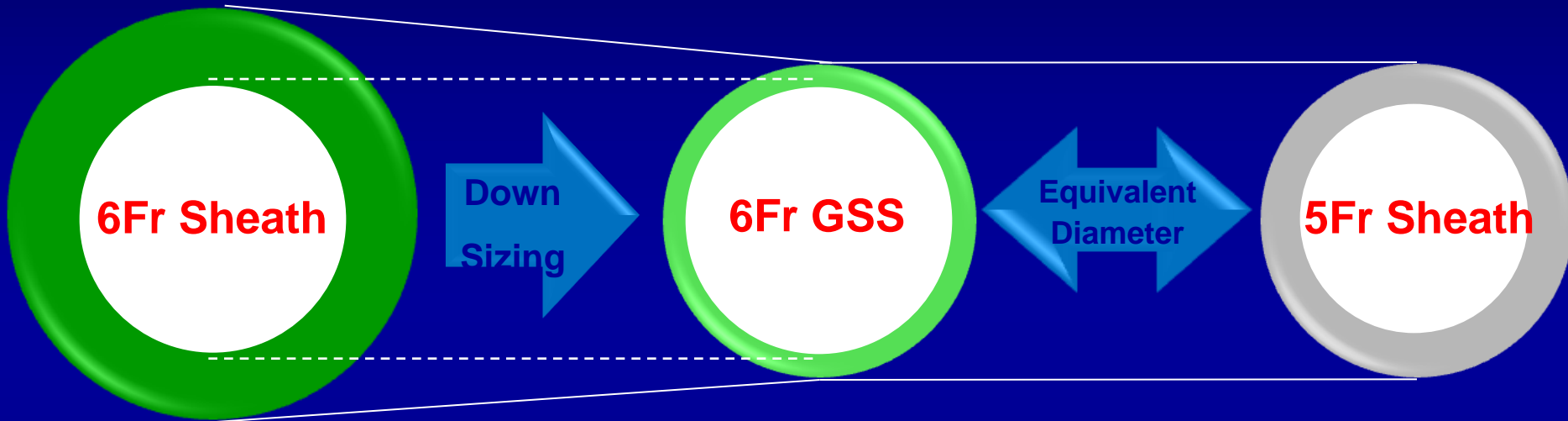
Glidesheath Slender®

1. New IS Product

1. Specially designed exclusively for **Radial access**
2. The world's thinnest wall with hydrophilic coating.
3. One size up guiding catheter is compatible.



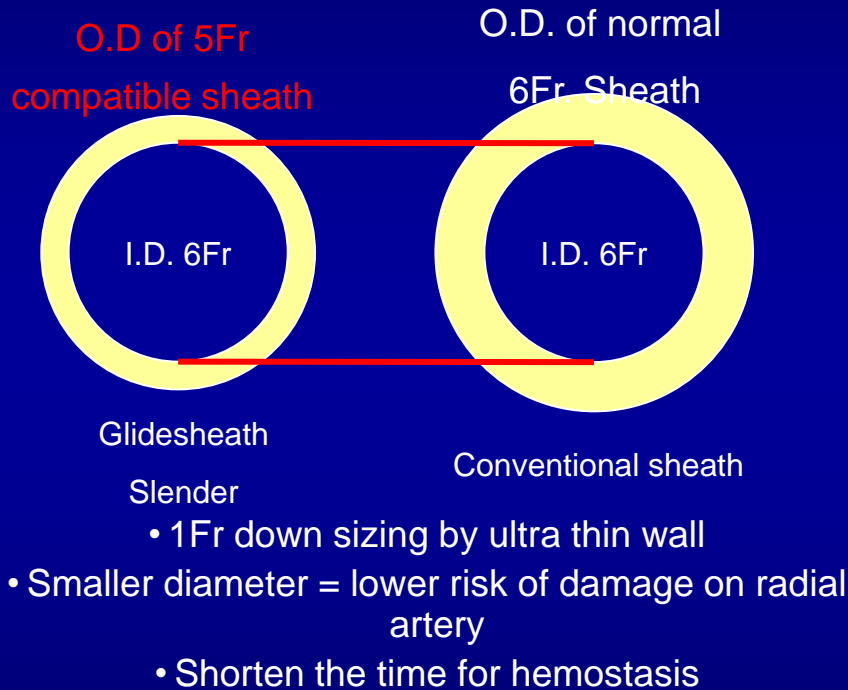
Glidesheath Slender Concept



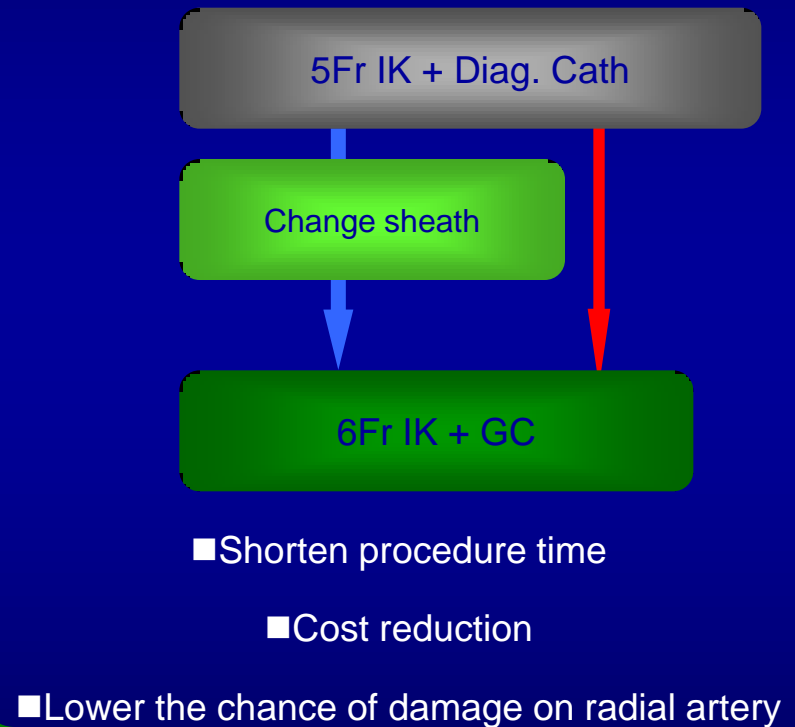
6Fr GSS is compatible with 6Fr guiding catheter while maintaining outer diameter of current 5Fr sheath

Expected Benefit

Less invasive

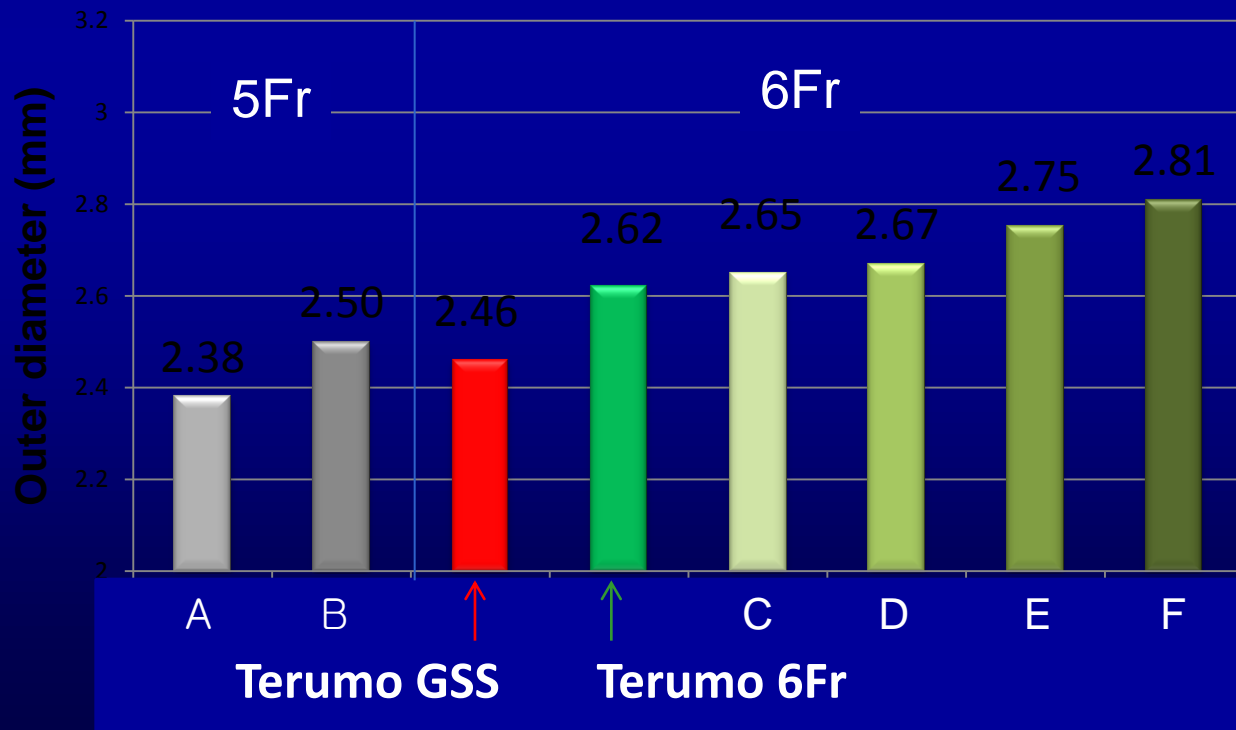
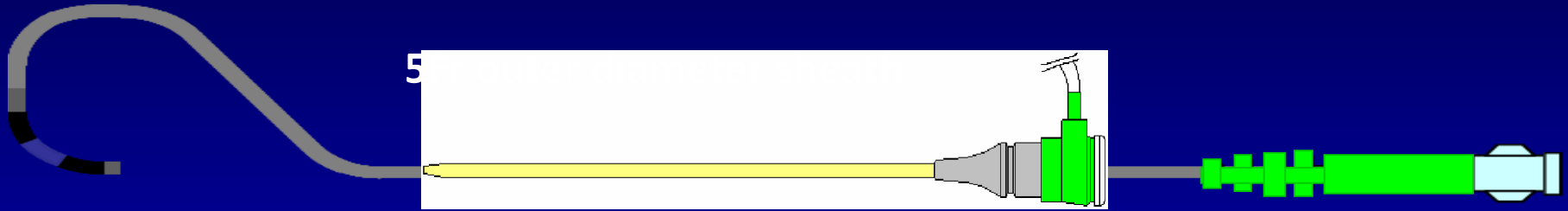


Efficiency at Ad-hoc case



New 6Fr Sheath Introducer (GSS)

with smaller outer diameter by 



Radial Artery Hemostasis Device

1. TR Band (Tran-Radial Band)
; Terumo, M/C (?)
2. Other Different Commercially Available
Radial Compression Devices...
3. RC Band (KUMC Guro/JSM)
; Radial-Compression Band
Rha SW-Cheon BW

TR Band (Terumo)



RC Band (KUMC/JSM)



Conclusion

Let's enjoy the TRI!!

**for every patient and
for every interventionist!!**